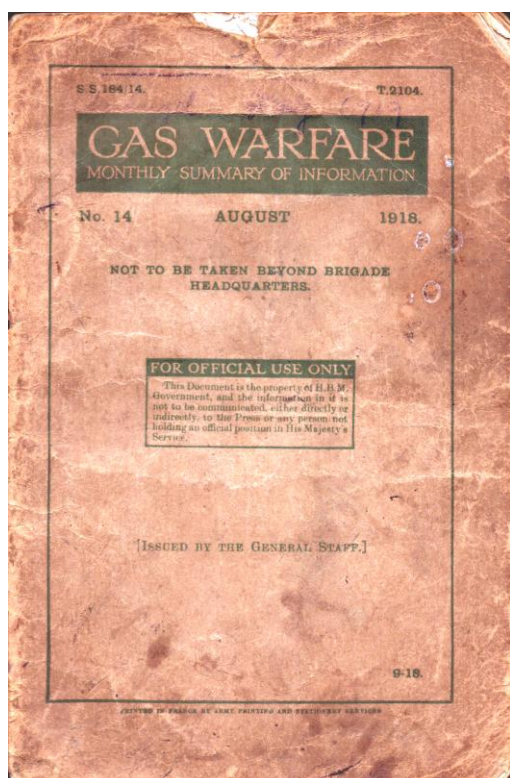


Gas Warfare in 1918 – David Gray



This article is a summary of information from the August 1914 edition of **GAS WARFARE MONTHLY SUMMARY OF INFORMATION No. 14**, *left*, printed in France by the [British] Army Printing and Stationery Services, and issued by the General Staff. The information was for official use only and was not to be taken beyond Brigade Headquarters. This was late in the war and discussed Offensive and Defensive Operations and also gave the latest information regarding German and Austrian gas shells and their fillings all of which would be a help to officers in the field. I was more interested in the practical use of gas as a weapon and also how to defend against it so will not go into detail here regarding types and fillings.

Operations of the Special Brigade R.E.

During the month of August 1918, 38 gas attacks were carried out, including two cylinder discharges. Operations took place on 18 separate nights and on

three occasions by day. [Livens] Projectors and Stokes mortars were generally employed. On several occasions the enemy's apprehension of gas was effectively exploited, dummy projector drums being fired in connection with infantry raids.

General – Recently captured prisoners of a German gas unit stated that when they were employed in carrying out gas attacks in Russia, they had on several occasions heard of the heavy gas casualties suffered by the Germans in British cylinder operations during the Somme battle in 1916. The only



Gas attack released from cylinders with a favourable wind

reason for their non-employment of cylinders on the Western front was the lack of favourable winds. These prisoners stated further that German losses from projector attacks during the Ypres battle, 1917, had been very severe.

Many captured German documents originating from German G.H.Q., Headquarters of Armies etc., bear witness to the effectiveness of British gas operations by the urgent warnings they contain concerning the danger of concentrated gas clouds from cylinders and projector bombs. The

necessity for reducing “inevitable casualties” to a minimum is emphasised.

The following extract is given from a report on the examination of prisoners:

“Generally speaking, although prisoners were quite willing to talk about ordinary matters, they were very reticent indeed on the subject of the effect of British gas. On officer in particular who spoke quite freely about other matters, went so far as to ask permission not to discuss the effects of British gas.”



British Livens **Projectors**. Soldiers loading gas bombs into a line of projectors

Evidence of results not previously known - Regiments of the 107th Div. and of the 43rd Res. Div. have been subjected to a series of small projector operations – five near Dernancourt, seven near Morlancourt and five near Saily-Laurette – during June and July 1918. Prisoners of the 52nd R.I.R., [Reserve Infantry Regiment] 107th Div., stated that on the 22nd June the 4th Coy. had 36 men evacuated owing to gas poisoning; the first battalion had to be relieved. Artillery prisoners had seen gas

casualties being carried away after our projector attack of the 28th June. On the 26th July, the 5th Coy. 227th R.I.R., lost 10

men in a projector operation carried out in daylight, 8 stretcher cases were seen leaving the area of the shoot. The cemetery attached to the Bavarian hospital at Maricourt had 337 new graves, largely, it was said, those of gas fatalities of 107th Div. The 6th Coy., 203rd R.I.R., 43rd Res. Div., had 20 men gassed, of whom the majority died. In a projector bombardment on the 25th June, the 11th Coy. lost 10 dead and 24 sick from gas.

The following extracts are taken from a captured German divisional report show the results of our projector attacks on the 18th June, against units of the 12th R.I.R., and 10th R.I.R. in Ablainzeville –

Only part of the garrison of Ablainzeville saw the flash of discharge. The flash and the ensuing concussion were mistaken for an enemy ammunition dump going up. Only one man heard the whirring noise of the projectiles, because this was drowned by the heavy burst of artillery and M.G. fire, which started just before the projectors were fired, and sent the majority of the garrison to cover.

At most places the gas alarm was given and masks were put on in time. Direct hits in or close to dug-outs lead to the rapid development of such a concentration of gas that the occupants could not get their masks on in time, while the heavy shell fire hindered rapid withdrawal from the gas cloud. The brunt of the attack fell on the 12th R.I.R., and coincided with the relief of the 3rd battalion by the 1st.

The village of Ablainzeville offers a favourable target for a gas bombardment, as the ruins and hedges prevent the dispersion of the gas. Dug-out entrances were furnished with gas curtains. The installation of projectors had been suspected, but had not been clearly identified in aeroplane

photographs. All regiments had been warned about this, and stringent precautions had been ordered, so the troops were not taken unawares.

The casualties amounted to:

- 2 Officers killed
- 51 O.R. killed
- 66 O.R. gassed



British Stokes Mortar

One of the officers had four years war service, and had been Regimental Gas Officer for over a year. That so expert an officer should have succumbed shows how difficult it is to recognise a projector discharge in time. Only a few men died on the spot. Many felt so well after the bombardment that they marched back on relief, and developed serious symptoms later. The O.C. 3rd battalion at first reported very few casualties. The mortality in the delayed cases was striking. The gas was assumed to be a mixture of chloropicrin, phosgene and chlorine.

The casualties were mainly attributed to:

1. The clever masking of the discharge of projectors by a burst of artillery and M.G. fire.
2. The fact that a relief was in progress, and that in consequence of this, many of the gas curtains had been rolled up to render passage in and out easy.
3. Numerous direct hits in or near the entrances of dug-outs.

The following conclusions were drawn:

1. Absolutely certain protection cannot be guaranteed in the case of direct hits, owing to the great concentration of the gas. The Army Gas School teaches that direct hits give rise to unavoidable casualties.
2. Dug-outs must be vacated in spite of heavy shelling if thick gas clouds gain entry.
3. Even men who are not apparently affected must avoid any movement when they have got out of the gas cloud.
4. Gas masks must be put on in the case of every heavy burst of H.E. shelling.
5. Annihilating fire should be directed on the opposing trenches as immediate retaliation.
6. Every effort must be made to recognise the discharge of projectors, and to spread warning.

7. Any trench mortar emplacements identified in aeroplane photographs should be destroyed by artillery fire.

The XVIII Corps ordered that, in future, a gas projector bombardment was to be followed exactly 24 hours later by shelling of the enemy's billets by Yellow Cross [gas] as a retaliation.

On four occasions during the period May-August 1918, projector shoots were carried out against units of the 108th Div. Between 200-300 gas cases were stated (by N.C.O.s of a bearer company of this division) to have passed through the main dressing-station during the above period. Many cases of death occurred in the line from gas. The mortality of gas cases was frequently as high as 50% in the case of projector bombardments. Death from delayed action of the gas was very common.



German victims of a gas attack near Ypres

Losses were inflicted on the 2nd Battalion, 22nd I.R., in a projector operation near Meteren on 30th April, 1918, the 5th Coy., alone losing 5 dead and 20 seriously gassed.

In a projector attack on Queant on the 12th March, 1918, the 15th R.I.R., suffered so many gas casualties that it had to be relieved immediately.

On the 25th July, 1918, 20 men were killed and 40 badly gassed in the 223rd R.I.R. by projector drums fired against the Gavrelle sector.

Cylinders were discharged in the Lens-Avion sector on the 13th July, 1918. Information obtained up to the present shows that the 1st and 3rd battalions of one of the regiments affected suffered 200 gas casualties.

The 11th Coy., 170th I.R., suffered 45 casualties from projectors on the 19th July, 1918, east of Avion. The same regiment also had many gas casualties from the same cause in the La Couronne sector on the 7th August, 1918.

Projector drums fired into Arleux on the 23rd July, 1918, killed 8 men and gassed 15 in one company of the 3rd Battalion, 69th R.I.R.

A gas projection in the Hulluch sector on the 18th July, 1918, caused 20 deaths and 30 gas cases in the 3rd battalion, 370th I.R.

A cylinder operation was carried out east of Ypres on the 24th July 1918, against the 1st Landwehr Division. Prisoners of a neighbouring division state that the 1st Landwehr Div. was relieved owing to the losses it sustained in this attack.

On the 6th August, 1918, a small projector attack carried out near Hamel killed 8 men and gassed 15 in the 5th and 8th Companies, 55th I.R. The 6th Company had heavier losses.

Projector drums were fired against Bucquoy on the 13th August, 1918. Information given by a stretcher bearer of the 15th R.I.R., who helped carry away 10 gas cases, shows that one company had 8 casualties and another 35.

Confirmatory evidence for a lot of these casualties also comes from a captured diary.

In gas losses suffered by the 12th Div., in the Merris-Meteren sector, the strength of companies of the 62nd I.R. was reduced to 30 men. In an attack in May, 1918, this unit had 40 men of the 3rd battalion gassed, of whom 19 died. Stretcher bearer N.C.O.s stated that from reports seen at the regimental aid post, over 200 gas casualties had been caused in projector attacks during this period.



German stretcher bearers

Confirmation was also furnished by prisoners regarding gas losses of the 10th R.I.R. in the sector S.W. of Lens at the end of May, 1917. During one projector operation a battalion relief was taking place and the drums fell in and around the crowded trenches. In one battalion alone, 60 deaths occurred in the line or at the dressing station. Another battalion had still a larger number of dead, the total casualties amounting to at least 400.

Neutralisation of Enemy Batteries – In one Corps, 93 gas bombardments on 50 hostile batteries during July resulted in the complete neutralisation of 21, none of which showed any subsequent activity up to the end of the month. In addition, 17 probably moved their positions and no certain activity was reported from the remainder.



German messenger dogs wearing gas masks

In another Corps, out of 19 batteries engaged on the night of the 9th/10th July, two were reported active on the 16th for the first time, two others on the 17th, and one on the 18th. No reply from the remaining batteries was recorded.

On the Italian front, various Austrian batteries were gas shelled on the nights of the 8th/9th and 9th/10th August. On the night of the 8th/9th, in conjunction with eight simultaneous raids from the British front, 20 active enemy batteries were subjected to short concentrations of gas shell. Not one of these batteries came into action during the

night. On the night of the 9th/10th, in support of a French raid, 16 of these batteries were again engaged, and only one was able to continue in action.



German horses wearing gas masks

A German Second Army document stated that the sectors occupied by the 109th and 225th Divs. Were bombarded with 'Yperite' [mustard gas] by the French on the nights of the 16th/17th and 17th/ 18th June. About 185 casualties occurred in the 109th Div., and about 80 in the 225th Div.

Enemies Defensive Measures

Examination of a number of the enemy's defensive positions south of the Somme proves that he has paid practically no attention to the gas-proofing of dug-outs, very few gas-proof curtains having been found. On the Third Army front, however, more attention had be devoted to this point, practically all large dug-outs having been found gas-proofed according to the British method of hanging the gas-cloth at an angle and fixing battens to keep the curtain flat. Small dug-outs were not protected.

A considerable quantity of enemy anti-gas material, including several thousand new drums [filters] was captured during the recent operations, and large anti-gas stores were found in Rosieres, at Le Quesnel (a divisional gas officer's depot), and in other places, including the region of some heavy artillery positions near Cayeux. The store at Rosieres was very complete; it contained many boxes of drums, extensions, masks, oxygen breathing apparatus, horse respirators and other appliances. The dump near Cayeux was apparently an artillery gas officer's store; there were 600 new unissued drums, as well as a number of older type which had been recently exchanged.

Description of other items found include:

- Gas masks for cases of head wounds.
- Gas sampling equipment.
- Horse respirators.
- Anti-dimming composition.
- Irritant cartridges for mask testing.
- Anti-Yellow-Cross wads for gas burns.
- Documents for dealing with enemy gas defence.
- New drums and extensions.
- Respirators for messenger dogs.
- Telephonic gas alarms.
- Austrian respirator drums containing mercury.

- Anti-gas pads. These were for the protection of civilian workmen, working for the Germans behind the lines. They were to be held over the nose and mouth until the danger had passed. [These would have given less protection than the horse and dog respirators].

It is worth noting that mustard gas was not a gas as we know it. It was more like an oily mist, which clung to anything it touched such as skin, clothing, surfaces in trenches and dug-outs and also contaminated foodstuffs and water.

If a man sat down in a trench or dug-out and contaminated his clothing without knowing it, he could then transfer this to any other location he moved to such as rear areas, hospitals, other field positions, transport etc. If another person then sat down in the same place, that person would become contaminated and would experience gas poisoning. The gas caused severe burns and blistering to any part of the body it touched, and could be breathed in to affect the lungs and kill the patient. Depending on how much exposure the man had, mustard gas could kill very quickly.